

## **REMARKS**

### **The claimed invention**

Claims 171 and 172 have been added to the application. Applicant submits that these claims are supported by the specification at page 9, line 6 and Tables 1 and 2.

### **Rejections under 35 U.S.C. § 112**

Claims 117, 125-132, 135-140, 141, 152-153, 156-158, 160, 163, and 168 stand rejected for failing to comply with the written description requirement. Claims 117, 125-132, 135-142, and 157 have been cancelled without prejudice. Applicant submits that the remaining claims are supported by the specification as originally filed. Claim 152 is supported by the text at page 12, lines 8-12. Claim 153 is supported by the specification at Tables 1 and 2. Claim 156 has been amended to recite a range of about 300 to about 600 microOhm-cm. A Declaration under 37 C.F.R. 1.132 executed by Michael Cima is submitted herewith. The Declaration demonstrates how claim 156, as amended, and 160 find support in the specification. Claim 158 is supported by the specification at Tables 1 and 2. Table A, below, shows the growth rates calculated using the thickness and conversion rate information in the tables. Claim 163 is supported by the specification at page 14, lines 18-20, Table 1, and page 13, line 30.

Claims 138-140 and 166-168 stand rejected under 35 U.S.C. 112, second paragraph as being indefinite. Claims 138-140 have been cancelled without prejudice. Claims 166 and 167 have been amended to depend from claim 170. Applicant submits that, because yttrium is a rare earth element, the failure to include yttrium in the preamble of claim 168 does not render the claim indefinite.

Applicant submits that the claims meet the requirements of 35 U.S.C. 112.

### **Claim Objections**

Claims 133 and 168 have been objected to. Applicant submits that the objection is moot in view of the amendments to the claims.

### **Rejections under 35 U.S.C. § 102**

Claims 117-120, 125-134, 136-139, 140-146, 151-162, and 164-170 stand rejected under 35 U.S.C. 102 as being anticipated by Solovyov. Applicant respectfully traverses. In addition,

Applicant submits herewith a Declaration under 37 C.F.R. § 1.131 to remove Solovyov as a reference. The Declaration states that the present invention had already been conceived and reduced to practice before the publication date of Solovyov. Applicant also submits herewith a Declaration under 37 C.F.R. § 1.132 executed by the undersigned for the purpose of establishing the publication date of Solovyov. Applicant submits that pending claims 143-146, 151-156, 158-162, 164, and 166-170 are patentable in view of Solovyov.

#### Rejections under 35 U.S.C. § 103

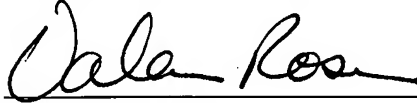
Claims 135 and 164 stand rejected under 35 U.S.C. 103 as being unpatentable over Solovyov. Claims 122-124 and 148-150 stand rejected under 35 U.S.C. 103 as being unpatentable over Solovyov in view of Iijima. Claims 121 and 147 stand rejected under 35 U.S.C. 103 as being unpatentable over Solovyov in view of Smith. Applicant respectfully disagrees. In addition, Applicant submits that the Declaration discussed above removes Solovyov as a prior art reference. Applicant further submits that none of Smith, Iijima or Solovyov, either individually or in combination, disclose or render obvious the subject matter of the invention. Applicant submits that pending claims 148-150 and 164 are patentable in view of Solovyov and Iijima, whether considered separately or in combination.

#### Double Patenting

Claims 117-170 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 40-63 of copending application number 10/194,561. Applicant respectfully disagrees. Nonetheless, in the interests of advancing the application to allowance, a terminal disclaimer is submitted herewith.

A petition for extension of time and the appropriate fee are submitted herewith. Please charge any fees associated with this filing, or apply any credits, to our Deposit Account No. 03-1721.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Valarie B. Rosen", written over a horizontal line.

Valarie B. Rosen

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